

**Remarks**

In view of the above amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

With the above claim amendments, claims 1-71 and 76-78 have been cancelled without prejudice and new claims 79-108 have been introduced. New claims 79-81 each recite a single species; descriptive support for these claims appears, e.g., in original claim 73. New claims 82-108 correspond generally to the presently cancelled claims, but have been made dependent on the product claims currently under examination. Although these newly introduced claims are properly considered withdrawn until product claims 72-75 and 79-81 are found allowable, for the reasons addressed below applicants submit that the elected product claims are allowable. Consequently, method of use claims 82-108 should also be allowable.

In view of the above amendments to the specification, the objection to the specification should be withdrawn.

In view of the newly-executed Combined Declaration and Power of Attorney form that accompanies this submission, the objection to the previously submitted declaration should be withdrawn.

The rejection of claims 72 and 75 under 35 U.S.C. § 112 (first paragraph) for lack of enablement is respectfully traversed in view of the above amendments.

Claim 72 presently recites that the isolated polypeptide “is selected from the group of (i) a polypeptide that comprises the amino acid sequence of SEQ ID NO: 4, SEQ ID NO: 5, or SEQ ID NO: 6, and (ii) a polypeptide consisting of SEQ ID NO: 3.” The outstanding office action confirms that the specification is enabling for the polypeptides of SEQ ID NOS: 3-6. Therefore, the rejection should be withdrawn.

The rejection of claim 72 under 35 U.S.C. § 102(b) as being anticipated by Shaw et al., “Ectopic Expression of Human and Feline CD9 in a Human B Cell Line Confers  $\beta$ 1 Integrin-dependent Motility on Fibronectin and Laminin Substrates and Enhanced Tyrosine Phosphorylation,” *J Biol Chem* 270(41):24092-24099 (1995) (“Shaw”) is respectfully traversed. Shaw identifies certain regulatory regions of the full-length CD9, but Shaw fails to identify any isolated fragments of CD9 as presently claimed. The rejection of claim 72 is therefore improper, and should be withdrawn.

The rejection of claims 72 and 74 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,439,886 to Ikeyama et al. ("Ikeyama") is respectfully traversed. The PTO has cited several polypeptides of Ikeyama that contain varied numbers of amino acids. By the above amendments, claim 72 no longer reads on any of the peptides of Ikeyama. Therefore, the rejection of claims 72 and 74 should be withdrawn.

The rejection of claims 72 and 75 under 35 U.S.C. § 103(a) for obviousness over Ikeyama in view U.S. Patent No. 6,472,520 to Fisher ("Fisher") is respectfully traversed.

The teachings and deficiencies of Ikeyama are noted above.

Fisher discloses a polypeptide that can include a linker or other sequence for ease of synthesis, purification, or identification of the polypeptide (e.g., poly-His or hemagglutinin), or to enhance binding of the polypeptide to a solid support. The PTO has relied upon Fisher as providing motivation to make a chimeric protein using the peptides of Ikeyama. Fisher fails to teach or suggest any other modifications to the peptides of Ikeyama.

Because claim 72 does not read on any peptides of Ikeyama and Ikeyama fails to teach or suggest the peptides are presently claimed, the combination of Ikeyama and Fisher fails to teach or suggest the presently claimed polypeptide and, thus, any chimeric proteins containing the same. For this reason, the rejection of claims 72 and 75 should be withdrawn.

In view of all of the foregoing, applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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